FISH AND WILDLIFE SERVICE
Caribbean Field Office
P.O. Box 491
Boqueron, Puerto Rico 00622

June 16, 2000

It. Colonel Jose A. Buitrago
Deputy District Engineer
U.S. Army Corps of Engineers 400
Femandez Juncos Ave. San Juan,
Puerto Rico 00901

Re: Maintenance dredging of Arecibo Harbor, Puerto Rico

Dear Lt. Col. Buitrago:

On June 14,2000, Service biologists Marelisa Rivera and Felix Lopez visited the disposal area for the maintenance dredging activity at the Arecibo Harbor. Based on their observations, information provided by Corps personnel at the site and from members from the community, open water disposal of dredged material had occurred at the site for several days.

The information we received indicated that the dredge spoil was initially being deposited about 300 feet from the shoreline. This created a fine grain sandy area over an area that previously contained a coral hard-ground community. The presence of this community was documented by the Corps during previous studies. Sand was deposited in this area for about four days. At the time of the inspection, the pipe had been moved to a location about 100 feet from the seawall and two bulldozers were trying to build a sand berm in the surf zone.

The plan at that time was to create a diked cell to receive the dredge spoil discharge. The creation of a dike was being hampered by the surf and fine grain size of the material. Attempts at controlling sedimentation were not in effect at the time of the inspection and dredge material was spilling into the adjacent sea and forming a plume that extended several hundred yards east of the disposal area.

Earlier this year, our office consulted with the Jacksonville Planning Division concerning this project. The disposal alternative preferred by the NMFS and evaluated by our office at that time, was beach disposal at an area centered on a small park overlooking the beach. The material was to be placed landward of the MLW line, up to and no further inland than the +5 foot contour. This criteria was described in letters from the Corps as the final design for the dredge disposal area. In our March 2000, letter we agreed with the Corps' determination that this beach does not

harbor suitable nesting habitat for endangered sea turtles and concurred with the determination of "not likely to adversely affect" these endangered species. Impacts to other fish and wildlife resources were considered to be minimal since all impacts were to be associated with beach disposal. Since the endangered species consultation process had avoided impacts of marine habitats our office did not comment on the potential for impacts to aquatic resources.

Service biologist Felix Lopez met with you and your staff on June 15, along with representatives of other Commonwealth and Federal agencies to discuss the concerns of the involved agencies. We understand the outcome of the meeting was the following :

I) The existing sand berm will be relocated to a spot 75 feet from the existing seawall at the east end of the beach. This will move it inland and away from the surf zone. The Corps will also move the dredge pipe closer as well. This berm will form the first disposal area.

2) The rest of the shoreline will be marked with stakes and survey tape to denote the mean low water elevations. This will allow heavy equipment operators to have a visual alignment of the rest of the berm route.

3) The remaining sand berm will be built using existing sand in the area and additional sand from the dredge if needed.

4) Toward the west there is very little sand but a well defined mean low water line on a rock shelf. Sand could be trucked or carried to that site for berm construction.

5) A Corps survey team will dive the area in the next few days to evaluate any impacts to marine habitats.

6) Dredging actions will recommence once the diver survey and initial berm construction is completed.

7) Provided that the above points are incorporated into the current dredging action and that dredge material will be deposited on existing sand or rock ledges above mean low water, our March 2000, concurrence of the determination that the project is not likely to adversely affect federally listed endangered or threatened species under Fish and Wildlife Service jurisdiction is still valid.

The material being dredged may be slightly anoxic due to the depth at which it is being extracted. This may cause a slight rotten egg odor due to hydrogen sulfide. This odor will dissipate once the sand dries. The dredged material will also contain benthic marine creatures, whose decomposition would also cause a slight odor but again that should not last for more than a few days. The sand being dredged is terrigenous in origin and as a result has a high mineral content. One of these minerals is magnetite a black fine grain mineral associated with these sands. This mineral is being deposited in streaks or patches along the area and may be confused with some form of contamination. This however is a naturally occurring substance.

Our office does not object to the sand being deposited higher than the previously established 5 foot contour since wave action will eventually sculpt the area into a stable slope.

We appreciate your cooperation and that of your staff in resolving the concerns related to this project and for working to ensure it is completed in an environmentally sound manner. If you have any questions regarding these comments, please don't hesitate to call. If I am not available, Felix Lopez or Marelisa Rivera of my staff are both very familiar with the issues and have visited the site.

Sincerely,

James P. Oland

Field Supervisor

ful/mtr
cc:
DNER, San Juan
COE, Jacksonville
*EP*A, New York
*EP*A, San Juan
CZM, Washington, DC
NMFS, Miami
EQB, Scientific Assessment Division
PRPB, San Juan
Sea Grant